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Via Electronic Mail and Regular Mail

February 21, 2014

Allison Gardner
United States Environmental Protection Agency
1650 Arch Street
Mail Code 3RC42
Philadelphia, PA 19103-2029

Re: **North Penn 5 Superfund Site, Operable Unit 2**
Report of Findings, Dated November 20, 2013 ("Report")

Dear Allison:

ABB Inc. ("ABB") is in receipt of Sharon Fang's letter to John Garges of Conestoga Rovers & Associates ("CRA") dated February 5, 2014 concerning the above-referenced Report. We asked CRA to provide us with a response to the issues raised in Ms. Fang's letter. Their comprehensive reply dated February 18, 2014 ("CRA Letter") is attached.

ABB stands by its efforts to detect the source or presence of 1,1,1-TCA in the area of former monitoring well MW-2, as well as the Report's conclusions regarding the absence of such contamination. We have carefully reviewed the EPA's comments, however, and wish to continue to cooperate with the Agency regarding the investigation of historical contamination at the Powertest Facility at 4379 County Line Road, Chalfont, PA (the "Property").

In that regard, EPA has proposed the installation of an additional well at a location on the western side of the building. As documented in the CRA Letter, that location is not suitable for a well. Alternatively, EPA recommended that MW-05 be redeveloped and resampled, and ABB will agree to perform this additional work. The scope of the additional work is described in the CRA Letter. Subject to coordination with the Property owner, this work would occur in March.

ABB will conduct this work voluntarily, and we welcome any input from EPA regarding the additional sampling. We are hopeful that the results of this effort will further demonstrate the absence of any 1,1,1-TCA contamination in the area of MW-2. For the same reasons we discussed around the time of our initial agreed-upon



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scope of work, however, ABB is not prepared to enter into the EPA's proposed RI/FS Administrative Order on Consent.

We would be pleased to discuss this with you and your technical team further, and will notify the Agency prior to conducting the additional sampling in any event.

Sincerely,



Peter R. Knight

Attachment

Copy to: Sharon Fang (EPA)
Matt Shepperd (ABB)
John Garges (CRA)





**CONESTOGA-ROVERS
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February 18, 2014

Reference No. 077128

Peter R. Knight
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

Dear Mr. Knight:

Re: Response to EPA Comments dated February 5, 2014
Regarding Report of Findings Dated November 20, 2013
Powertest Facility
North Penn Area 5, OU 2, Colmar, Pennsylvania

This letter presents a response to EPA's February 5, 2014 comments regarding the November 20, 2013 Report of Findings for the Powertest Facility at 4379 County Line Road, Chalfont, PA 18914.

Former monitoring well MW-2 was completed in shallow bedrock in 1990 in connection with Phase II activities at the Facility. Five groundwater samples were collected at MW-2 in 1990, May 1998, August 1998, October 1998, and May 2003. Elevated concentrations of 1,1,1-TCA were detected in several of these sampling events. In EPA's Responsiveness Summary in connection with the 2011 Record of Decision (ROD), EPA concluded that the 1,1,1-TCA concentrations detected in groundwater samples from MW-2 were localized based on the fact that 1,1,1-TCA was detected in no other groundwater samples collected in the area of the well or to the north of the well in the residential neighborhood. EPA also concluded that the 1,1,1-TCA is isolated and not a source of contamination in the OU2 bedrock groundwater plume. The EPA requested that ABB complete an investigation in the vicinity of monitoring well MW-02 to determine if 1,1,1-TCA is a source to groundwater.

Following an EPA-approved Work Plan, investigation field activities were completed in 2013 and documented in the November 20, 2013 Report of Findings. The following presents a summary of the investigation results:

- The soil analytical results of the investigation did not indicate the presence of, or any impact from, 1,1,1-TCA in the vicinity of former monitoring well MW-02. There were no detections of any compounds in the soil with the exception of Methylene Chloride, which is a common laboratory contaminant and was detected in the lab blank.

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- 1,1,1-TCA, the primary compound of interest, was not detected in any groundwater samples. Further, the results for most VOCs were also non-detect. There were very low level detections of several VOCs (e.g., TCE, 1,1-DCE, Toluene) in the groundwater samples with most of the results estimated below detection levels. No compounds were detected above their respective MCLs. 1,4-dioxane was detected in one of four groundwater samples. A concentration of 2.5 ug/L was detected in the 43-48 foot packer interval. While an MCL for 1,4-dioxane has not been established, the 2.5 ug/L result is below the Pennsylvania Department of Environmental Protection (PADEP) risk screening level for 1,4-dioxane (5.6 ug/L).

A conference call was held on January 28, 2014 to review EPA's initial comments regarding the Report of Findings. EPA then provided official comments in a letter written February 5, 2014. The following presents EPA's comments in regular font, followed by CRA's responses in bold, italic font.

1. Figure 1 identifies three locations identified as PTGP-19. True locations were clarified during the January 28 call.

Figure 1 inadvertently included three locations as PTGP-19. Two of the three locations were mislabeled. Boring PTGP-19 located near boring PTGP-18 is the correct PTGP-19. Boring PTGP-09 is the boring located immediately northwest of MW-5S/D and southeast of PTGP-10. Boring PTGP-17 is the boring located immediately southeast of MW-5S/D and northeast of PTGP-05. The revised Figure 1 is attached.

2. Figure 1 shows the newly installed well MW-05S/D in a location presumably upgradient of the previously installed MW-02.

Wells MW-05S/D are effectively in the same location as former MW-02 (~12 feet southwest). The wells were positioned as close to the previous well MW-2 as possible. The wells could not be completed in the location proposed in the Scope of Work due to safety and logistical concerns (as explained in the next paragraph), but were completed within approximately the same distance as proposed. Although the wells were not placed in the presumably downgradient location (although there is not clear evidence regarding groundwater flow in the shallow bedrock), the wells were completed along strike (and presumably side gradient). Regardless, CRA believes that groundwater conditions from the new wells are representative of groundwater conditions at the location of former MW-2 (only ~12 feet away).

Attached are some photos of the Facility. The 1st photo (Photo 1) is looking at the area northwest of the building from around the railroad track (view is to the northeast). This is the area which EPA believes to be hydraulically downgradient and suggested installing another monitoring well during the January 28th conference call. As seen on Photo 1, there is



limited space between the building and railroad to accommodate drill equipment and operate safely. Further, there are high voltage power lines running parallel to the railroad tracks and directly overhead. This area was reviewed by the driller in the field, and they noted that they could not drill in this area due to the limited access, nearby railroad, uneven terrain, and overhead power lines. The 2nd photo (Photo 2) shows the drillers air rotary drill rig and support vehicle. Both are large, and the drill rig boom when extended it ~30 feet high.

3. Page 11 states that there do not appear to be any current 1,1,1-TCA or other VOC impacts in the soil or groundwater. However, both 1,4-dioxane (an additive and associated compound of 1,1,1-TCA) and 1,1-dichloroethene (1,1,-DCE) (the hydrolysis product of 1,1,1-TCA) were found at low concentrations in the groundwater. The presence of these compounds, even in small amounts, would indicate the presence of 1,1,1-TCA, given that 1,4-dioxane is a conservative chemical (flows with groundwater and is not attenuated) and 1,1-DCE is a reaction product of 1,1,1-TCA in water.

We made a significant effort to find a VOCs source in the soil and groundwater near former well MW-2. The results confirm no source is currently present.

1,1,1-TCA and its associated daughter products (and 1,4-dioxane) were not detected in soil. This is consistent with the EPA's own results from the RI soil sampling. EPA collected subsurface soil samples at and near the Powertest property. The RI did not identify a source of VOCs in the Powertest property soil. The 2013 results confirmed these findings.

1,1,1-TCA was not detected in any of the 2013 groundwater samples collected. The presence of 1,4-dioxane (2.5 ug/L in the 43-48 packer interval) and 1,1-DCE (1.0 ug/L in the 43-48 packer interval and 1.0 ug/L in MW-5S) in small amounts in the groundwater samples (all below MCLs and PADEP risk screening levels) does not explicitly indicate the presence of 1,1,1-TCA in the soil or groundwater. 1,1,1-TCA does degrade to 1,1-DCE (note that it is also a breakdown product of TCE); however, it is clear from historical data that 1,1,1-TCA was undergoing degradation into daughter products in the late 1990s and early 2000s. The MW-02 and MW-5S/D groundwater results indicate that while there was a former presence of 1,1,1-TCA, it has now attenuated completely. These results are consistent with the EPA's own hypothesis based on the RI results. EPA concluded that the 1,1,1-TCA concentrations detected in groundwater samples from MW-2 were localized based on the fact that 1,1,1-TCA was detected in no other groundwater samples collected in the area of the well and to the south of the well in the residential neighborhood. The intention of the 2013 sampling was to confirm there is not a significant VOCs source, and the results confirm that to be the case.

4. Well Logs show five locations (PTGP-13, PTGP-14, PTGP-15, PTGP-16 and PTGP-17) with much higher PID readings than the other eleven Geoprobe points. PID Readings were as high as 69 (presumably ppm). There is no discussion of this finding in the text.



CRA did not perceive these PID readings as significantly elevated. They may have been due to additional moisture in the air during the specific day of sampling when these borings were all drilled (June 20, 2013). Although no staining or odors were observed, CRA field staff did collect additional soil samples where these PID readings were observed in borings PTGP-13, PTGP-14, and PTGP-15. Again, all soil results were non-detect for all analytes (with the exception of methylene chloride that was due to lab contamination). No statistically significant positive correlation has ever been made between PID readings and actual lab concentrations. PID measurements serve simply as a sampling guide, but should not be viewed as a surrogate for actual lab results. The lab results speak for themselves; no VOCs were detected.

5. Low Flow Sampling Data Sheet. Well MW-05S had an unusually high pH. No explanation was provided. Well MW-05S also showed increasing turbidity with purging; indicating that parameter stabilization did not occur prior to sampling. Low flow sampling is not appropriate if the stabilization parameters do not stabilize prior to sampling. The groundwater sampling may have been affected by well completion and development and/or a more permeable feature in the filter pack rather than the formation. Thus, in bedrock wells, it is recommended that purging is at a rate slightly less than the yield and that three well volumes are removed to ensure a representative sample of the groundwater.

While CRA believes all samples that were collected to be accurate with respect to VOCs results, CRA proposes to collect additional samples from wells MW-05S/D as described in the response to the next comment.

Note that the packer testing included significant pumping of each flow zone followed by sampling. For the deepest zone (where well MW-5D was subsequently constructed), the interval was pumped at a rate of ~2 gpm for a period of 30 to 35 minutes (~5x the volume of the packer interval of five feet). For the shallowest zone (where well MW-5S was subsequently constructed), the interval was pumped at a rate of ~1.5 to 2 gpm for a period of 35 to 40 minutes (~4x to 5x the volume of the packer interval). These pumping rates were near the maximum yield in each flow zone. The analytical results from the packer test samples were below MCLs. Therefore, pumping larger volumes (flow) and then sampling monitoring wells MW-5D and MW-5S has effectively already been done.

Given the upgradient location of the newly installed well, the use of the low flow sampling method without parameter stabilization, and the detections of two compounds associated with 1,1,1-TCA, along with the potential for contamination indicated by the high PID readings at the geoprobe locations on the apparent downgradient side of the building, the data do not fully support the Section 4 Conclusions presented. It is recommended that an additional well be installed at a location on the western side of the building, in a location near to and



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downgradient of the abandoned well MW-02. In the event an additional well cannot be physically installed downgradient of the abandoned well MW-02, EPA would ask for documentation of the infeasibility of drilling a downgradient well. Further, if it is infeasible to install a well downgradient of the former MW-02 location, EPA would recommend that MW-05 be redeveloped and that a pump test of limited duration with time-series sampling be performed using MW-05.

EPA encourages ABB, Inc. to enter into an agreement with EPA for future performance of work at the Powertest property, so that EPA approval and oversight can limit any future need to remobilize.

As noted above, it is not technically feasible to install a well in the downgradient direction of former well MW-02.

As per EPA's request, CRA proposes to redevelop, and then complete a pump test of limited duration with time-series sampling at monitoring wells MW-5D and MW-5S. The pump tests will be conducted for a duration of 60 minutes (one hour) at a pumping rate slightly less than the yield of each well. Three samples will be collected (samples at 20, 40 and 60 minutes). The samples will be placed on ice and submitted to a laboratory for VOCs analysis. Note that it is anticipated that this pump test approach will result in significantly more than three volumes being removed from each well.

Please call me if you have any questions or comments regarding this proposal.

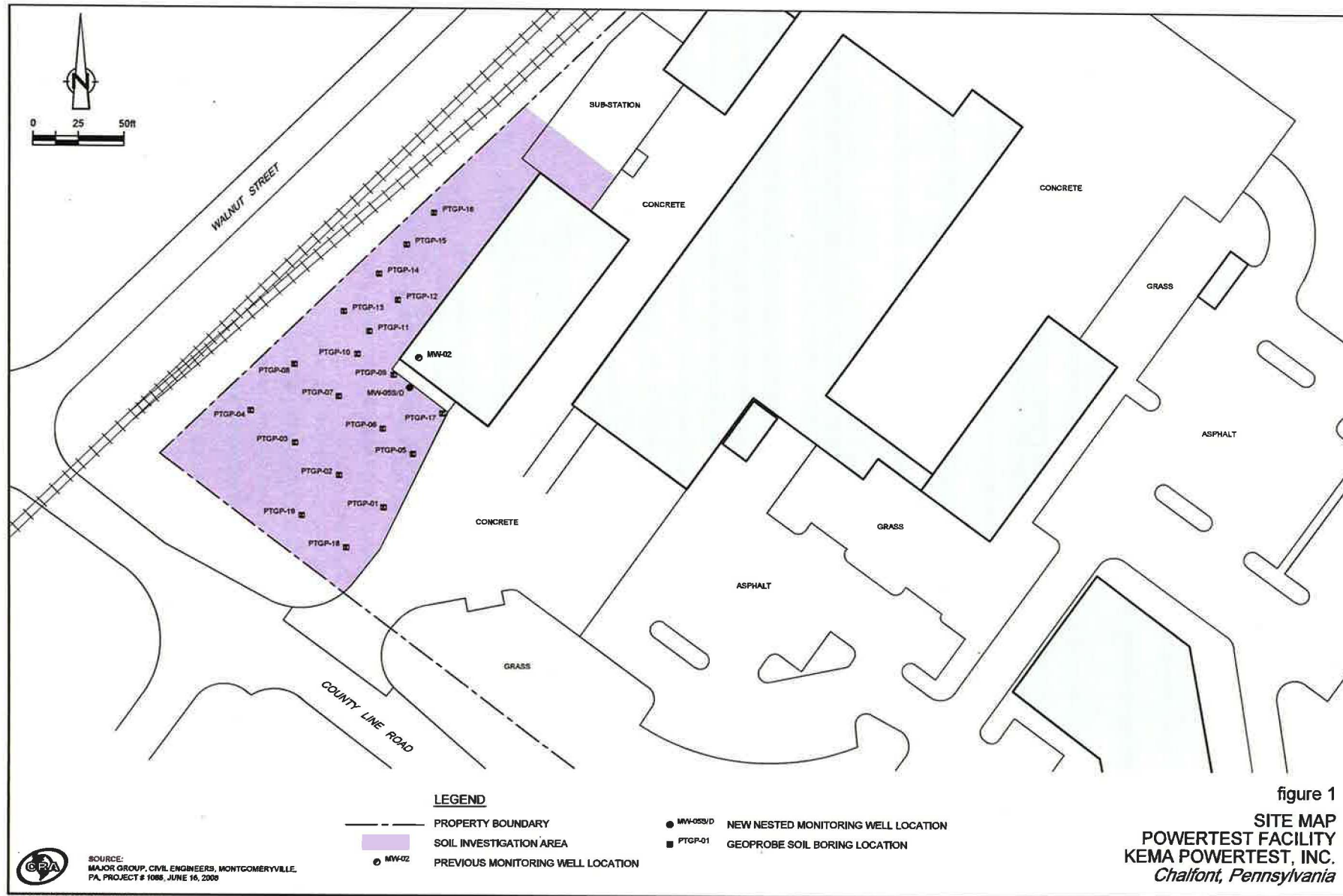
Very truly yours,

CONESTOGA-ROVERS & ASSOCIATES

John A. Garges, P.G.

SK/sk/6

c.c.: Matt Shepperd, ABB





High Voltage
Overhead Lines

Approximate Area
of EPA Proposed Well

Figure 1
Powertest Facility Looking NE



Figure 2
Air Rotary Drill Rig and Support Truck